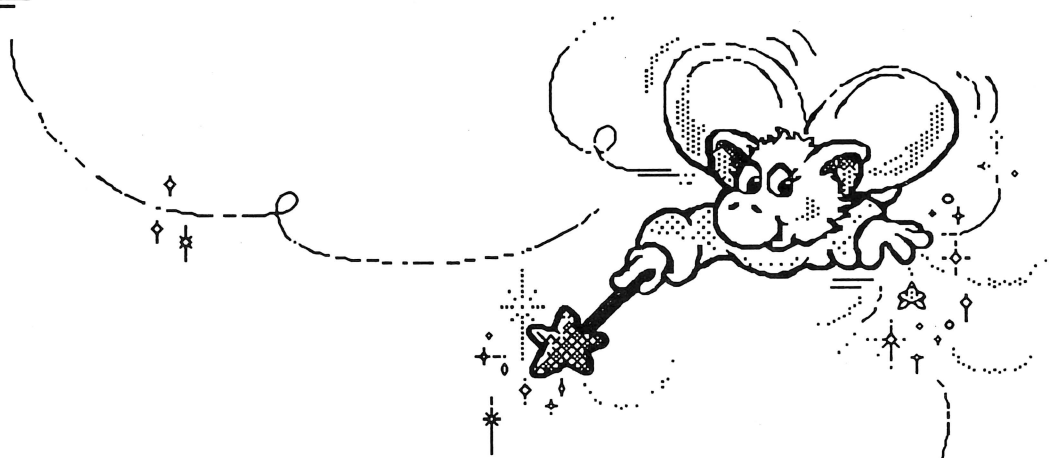
FRACTION FAIRY TALES™
with the Boars!



Created by TOUCAN SOFTWARE

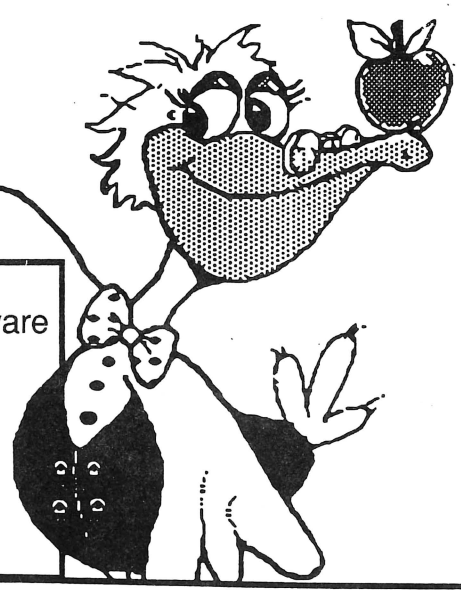
Introduction

Learning fractions is always one of the most difficult mathematical skills for children. The idea behind *Fraction Fairy Tales* is that learning fractions is really a simple concept, if presented using familiar objects. Even young children use fractions everyday without realizing it.

This simple to use program takes advantage of the fact that we are surrounded by a world of fractions. It is designed to provide an environment where children can investigate, explore, and discover the concepts underlying fractions in a range of informal activities, that provide the foundation for later formal study. Clear graphics supply concrete representations of fractional concepts. While more abstract than hands on activities, they are an ideal supplement, bridging the gap between the concrete and representational mathematical ideas.

Fraction Fairy Tales presents fractions in a whimsical and charming way. Colorful scenes of favorite fairy tale settings, sing-a-long songs, and engaging animation will keep your children excited and involved. Bina Boar stars as Snow White with the seven "boars", along with other favorites such as Cinderella, Rapunzel, and the Ugly Duckling!

Fraction Fairy Tales makes learning fractions a little bit easier and a lot more fun as Binkle Boar, a tiny fairy, flutters around the screen pointing to different fractions with her twinkling wand. Children will love using her wand to "fill in" the fractions. When the answer is correct, the funny Boars come alive to familiar childhood tunes. Incorrect responses elicit only an encouraging tweet. Children are given helpful hints which explain the thinking process behind fractions. These hints will help them correct their own answers. And, as with all Toucan products, children will be learning . . . for the fun of it!



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How to Play...

Fraction Fairy Tales uses a few special keys. These are:

SPACE BAR - to highlight selections on the screen, to advance the cursor or to move Binkle.

Up Arrow Key- to "fill in" each part of an object.

Down Arrow Key- to "unfill" each part of an object.

RETURN - to select.

ESC - to go back to the menu.

Apple S - to turn the sound on or off.

? - to see a HELP screen explaining special keys for the level you are on.

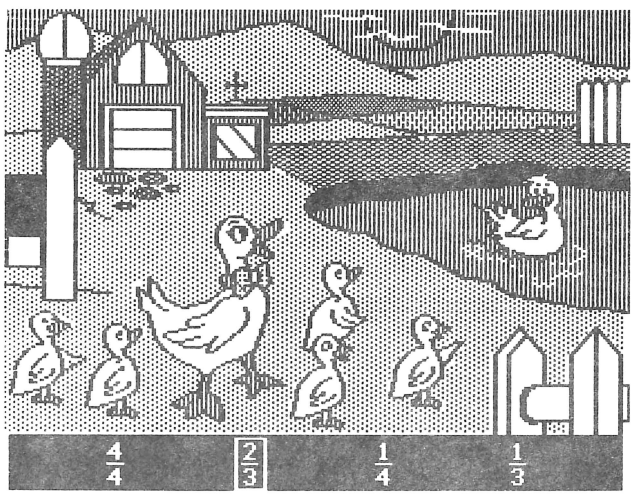
Fraction Fairy Tales can be used at two levels:

Level 1: Identifying Fractions

Level 2: Parts of a Whole

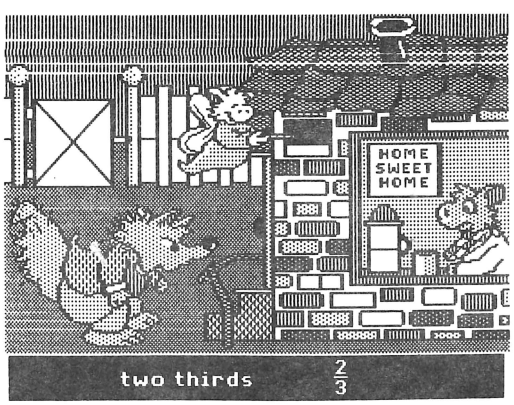
Level 1: What is It?

A part of an object is flashing in the picture. Four fractions are randomly displayed in the black bar below the picture. The child must choose the *matching* fraction by using the SPACE BAR to move the box from one fraction to another and pressing RETURN. If the correct fraction is chosen, it is displayed both written and numerically and an animation occurs.
If the choice is incorrect, the incorrect fraction disappears and the box moves to the next choice. If an incorrect choice is made again, that fraction disappears and the process continues until the correct fraction is the only fraction left. Press RETURN to view the animation.



Level 2: Find & Fill!

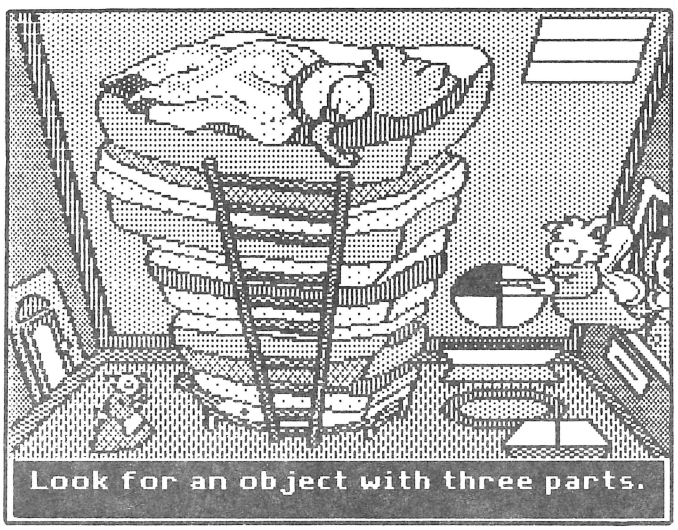
A fraction is displayed both in words and in numbers below the picture. Use the SPACE BAR to move Binkle to the object that is divided into the number of parts reflected in the denominator; (i.e. If the fraction is 1/3, move Binkle to an object that is divided into three parts.)
Use the up arrow key to "fill in" each part of the object to *match* the fraction displayed and press RETURN. If the child filled the correct number of parts, the Boars will spring into action! If the child filled an incorrect amount of parts and pressed RETURN, the program will tweet. To unfill a part of a fraction, use the down arrow key.



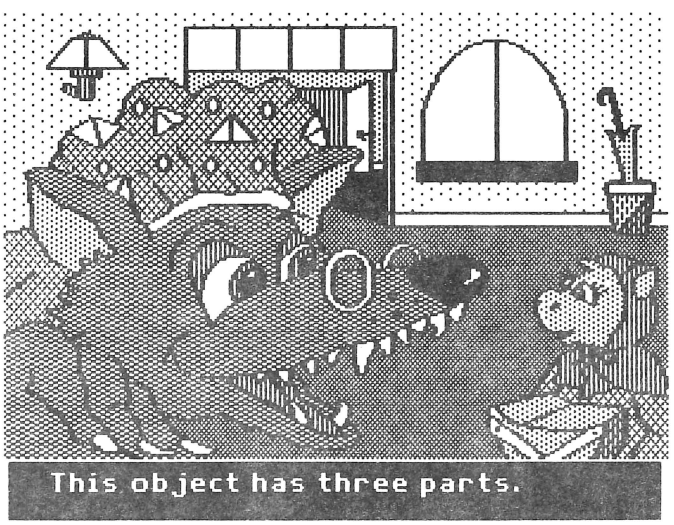
Note: *If the fraction to fill is 1/2, and the child fills 2/4, a prompt appears below the picture: 2/4 is equal to 1/2, but the object has the wrong number of parts.*

If a child moves Binkle to an object with the incorrect number of parts, fills a fraction and presses RETURN, a tweet indicates that the choice was incorrect.

If he tries to fill the wrong object again, a prompt appears below the picture: *Look for the object with three parts.*



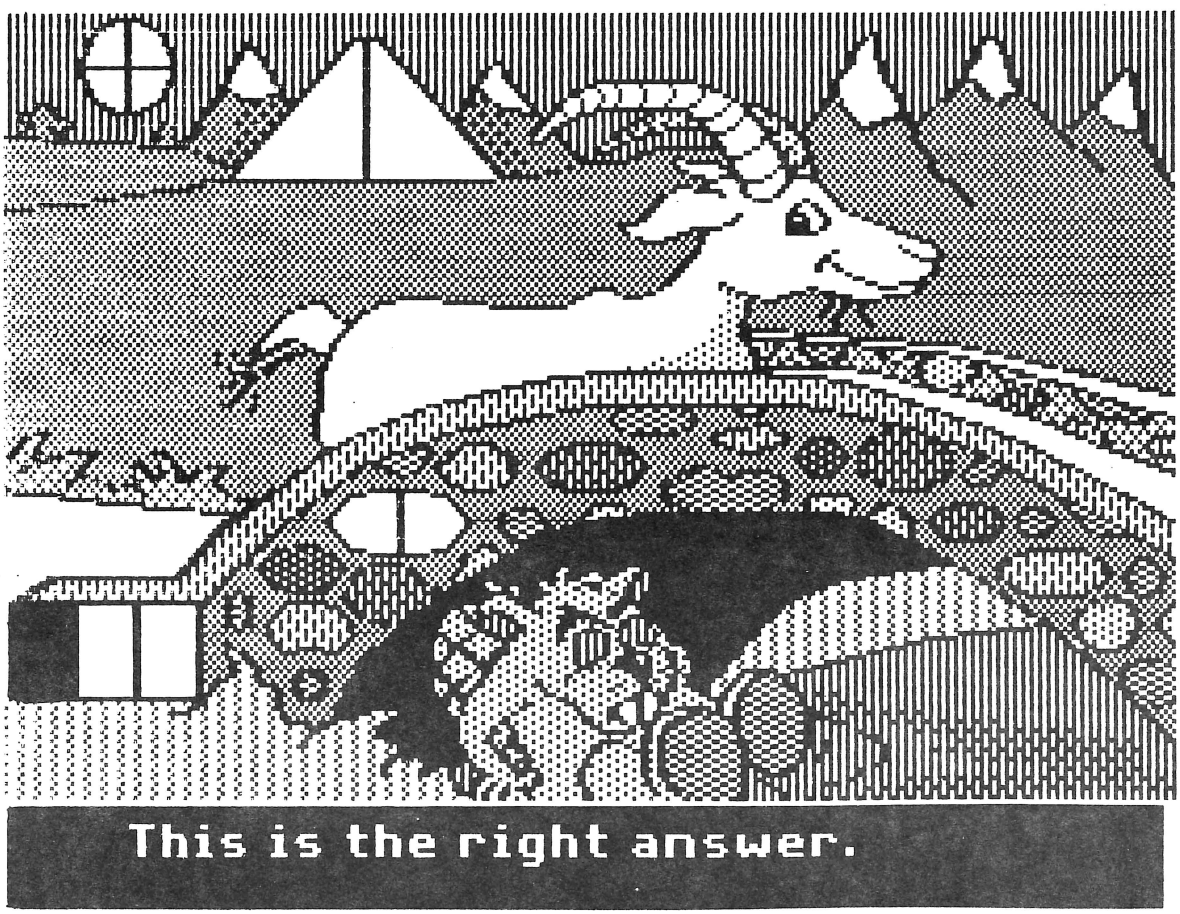
If the incorrect answer is chosen again, a prompt appears:
This object has three parts. Binkle automatically moves to that object, while the correct number of parts are flashing. Press any key and the fraction is displayed once again below the picture and it's time to try again. Now that Binkle is pointing to the correct object, the child can attempt to fill in the correct number of parts.
If she fills in the incorrect number of parts, a tweet will once again indicate an incorrect response.



If the answer is incorrect again, the prompt appears:
Fill in the correct number of parts.

After another incorrect choice, the prompt appears:
Fill in three parts.

If the answer is incorrect this last time, the prompt appears:
This is the right answer.
The correctly filled fraction will flash in the picture.



TEACHING SUGGESTIONS

HOMEWORK

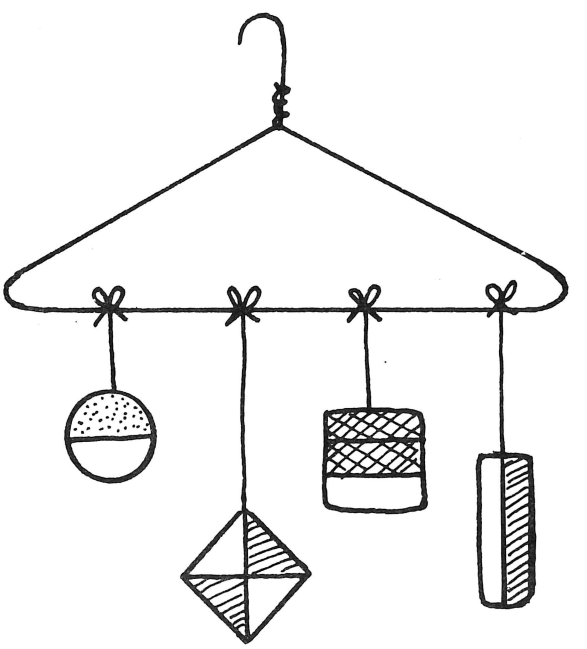
Have students look through various magazines to find pictures that show fractions found in objects. (i.e. A picture of a window with four parts.)

FLYING FRACTIONS

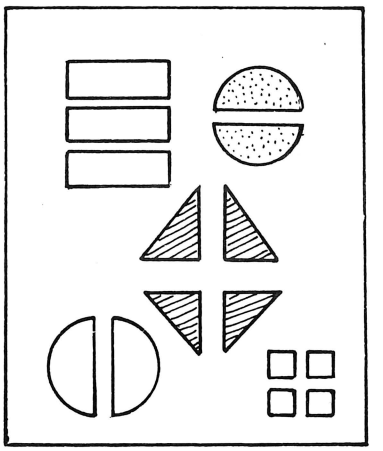
What you'll need to get started:

Coat Hanger or wooden dowel
Tape or glue
Ribbon or colored yarn
Construction paper
Scissors

First have each student pick a fraction (1/2, 1/3, 1/4).
Cut out a bunch of rectangles,circles and squares and have the students color in fraction parts, using different colors. Hang the shapes with varying lengths of colored yarn.



STAINED GLASS POSTERS

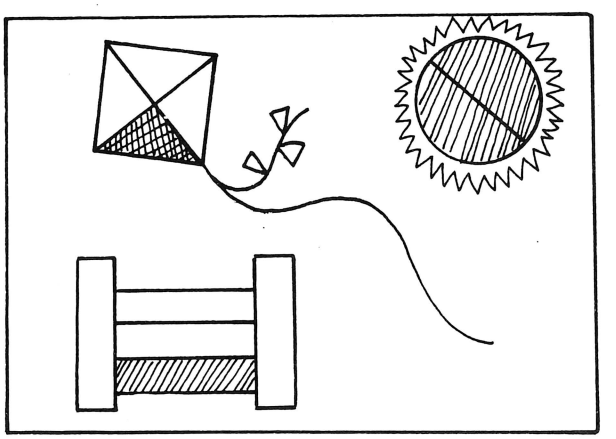


What you'll need to get started:

Multi-colored construction paper
Multi-colored poster board
Scissors
Glue
Ruler

Each student should cut out a variety of shapes {squares, circles, rectangles and triangles} using different colored paper for each shape. Next have them cut their shapes into equal parts representing fourths, thirds and halves. Glue the different parts onto colored poster board, leaving a little space in between each fraction part. Have students use all of the shapes representing different fractions to create wonderful fraction posters!

FRACTION BULLETIN BOARD



What you'll need to get started:

Multi-colored construction paper
Scissors
Glue
Yarn
Ruler

In a group, talk about what the background scene should be, for example, the country, a city, or a classroom. Try to get the students involved in thinking of objects, for that scene, as fractions. (i.e. A kite could be divided into fourths, the sun in halves, and a gate in thirds.) Cut out the object shapes and divide them into sections. Different parts could be colored in, so the bulletin board can become an activity for finding fractions. *One fourth of the kite could be colored in red, both halves of the sun could be orange, and two thirds of the fence could be white. Can you find an object with three parts? Can you find 2/3?* This is a great reinforcement activity before or after using the program!